

Commonwealth of Virginia Professional Soil Scientist Examination

### INTRODUCTION

The Candidate Information Bulletin (CIB) is intended for your use in the preparation for and understanding of the process and procedure pursuant to your certification. The CIB pertains to the Virginia Professional Soil Scientist Examination Program.

The Virginia Department of Professional and Occupational Regulation (DPOR), Board for Professional Soil Scientists and Wetland Professionals is responsible for -certification and regulation of the profession.

The Board through DPOR requires an application for certification, as well as, the use of a variety of other forms for Board review and approval. You may download this information at

www.dpor.virginia.gov/licenseapp\_main.htm. Please follow the procedures as outlined or contact the Board office for the necessary forms, and questions concerning the application or eligibility process at:

## **DPOR**

Perimeter Center, Suite 400 9960 Mayland Drive Richmond, VA 23233 804.367.8506 or 804.367.8512 Fax: 804.527-4294

### **EXAMINATION PROCESS**

# Steps to Testing

- 1. Download Application Form from DPOR web site at <a href="https://www.dpor.virginia.gov">www.dpor.virginia.gov</a> or contact the Board at 804-367-8512.
- 2. Complete Application Form with other requirements and forward to the Board office at least 90 days prior to the examination.
- 3. If approved for the exam, you will receive an Approval Letter from the Board.
- 4. Schedule/Admission Letter will be mailed to the candidate approximately five (5) days following the examination fee deadline.

# **Special Accommodations**

If you have a disability under the Americans with Disabilities Act (ADA) and may require some accommodation in taking this examination, please follow the procedures as outlined in your approval letter. ADA Accommodation Request Forms must be returned to the Office of Education and Examinations with supporting documentation explained in the ADA Accommodation Request Form. Request for accommodations must be received not later than 30 days prior to the examination date.

You will be notified by DPOR of the accommodations granted. In making your request, please allow sufficient time for your paperwork to be evaluated and a determination to be made.

Please note: A language barrier is not considered a disability.

#### **Examination Schedule**

The following table lists the examination dates and application deadlines for 2008.

Exam Date	Deadline Date
February 6, 2009	November 6, 2008
August 7, 2009	May 7, 2009

Deadline dates are based on receipt of completed application and fee and not by postmark date. Once approved, examination fees are due 30 days prior to the exam date.

# Test Site and Reporting Time

Examinations are administered at the Department of Professional and Occupational Regulation, Perimeter Center, Suite 400, 9960 Mayland Drive, Richmond, VA. Exact test reporting time will be provided in your admission documentation. A map to the site with a memo on parking will also be provided. It is also suggested that you visit a web site for driving directions from where you are in relation to the test site.

# Refund and Rescheduling Policy

Candidates will have until the exam fee deadline to request to cancel an examination without forfeiting the examination fee. The request must be in writing and forwarded to the Office of Education and Examinations. Requests after the deadline will only be approved if there is an extenuating circumstance and proper documentation is provided, such as military orders, illness, death in the family, etc. Job requirements, planned vacations, lack of study time, etc. are not considered extenuating circumstances.

It is your responsibility to contact DPOR prior to the test date if you have not received your admission documentation. DPOR has no control over the U.S. mail. If you do not appear for testing, you will forfeit your examination fee.

# **Environmental Distractors**

Although every attempt is made to provide a quiet and comfortable test environment, noise and room temperatures may be an unforeseen distractor. It is suggested that if you are sensitive to noise or temperature variations,

you may want to bring earplugs and wear types of dress that can help you to adapt to a cooler or warmer climate in the examination

# **Emergency Policy**

In the event of inclement weather or another emergency, an examination may be cancelled or delayed. If cancelled, the examination will be rescheduled as soon as possible and candidates will be notified.

# **Admission Requirements**

- 1. You must present your admission letter and one form of identification with a photograph and your signature (i.e. drivers license, school or work identification card, or passport) in order to be admitted to the examination room.
- 2. The identification must be current and clearly recognizable or you may not be admitted to test.
- 3. Candidates are required to complete and sign the Examination Site Conduct Agreement Form prior to taking the examination.
- 4. It is your responsibility to be at the examination site on time. Candidates will not be permitted into the examination room after the announcements have begun. It is strongly suggested that you visit the site before the day of the exam so you are familiar with the route and the needed time.
- 5. There is ample, free parking in the lot in front of the building. Parking is on a first-come, first-served basis.

Several handicap access parking spaces, with no time limit, are available to vehicles displaying the appropriate handicapped parking access signage or license plates.

### Items for Use in Examination Room

The Professional Soil Scientist Examination is a closed book examination.

You should bring #2 pencils with an eraser.

Calculators are permitted in the examination room. Calculators must be non-communicating, battery-operated, silent, non-printing calculators. Devices with word processing capability (QWERTY keyboards) are not permitted. The Board will not allowed any information, study materials or formulas are to be programmed, entered and/or stored in the memory of the calculator before, during or after the exam. Standard formulas which are pre-programmed in the calculator by the manufacturer and cannot be removed are allowed.

All items brought to the test site will be the candidate's sole responsibility. The Board and the facility will not be held responsible for any lost, misplaced and/or stolen items.

## Items Prohibited in Examination Room

You may not have alcoholic beverages, calculators, electronic devices such as cameras, walkmans, radios, tape players, portable fax machines, cellular telephones, calculator watches, reproduction equipment, computers, or pagers in the examination room.

If any of the aforementioned items are found in the possession of a candidate, the Examiner will collect it until the end of the examination and a report will be written documenting the incident to the Board.

Smoking is prohibited. Wearing hats is prohibited.

You may not have pens, or highlighters. .

## **Security Guidelines**

The Commonwealth of Virginia copyrights all test questions. Copying, reproducing or

taking any action to reveal the contents of an examination in whole or in part is unlawful. Removal of an examination booklet, answer sheet or other confidential material supplied to you at the test site is prohibited.

Any irregularity such as an act of impersonation, creating a disturbance, giving or receiving unauthorized information or aid to other candidates, attempting to remove test information by any means, possession of unauthorized notes or equipment is sufficient cause for you to be expelled from the examination room. All such irregularities will be reported to the Board and may affect certification.

No visitors, guests or children are permitted in the examination room.

#### **EXAMINATION CONTENT**

# Professional Soil Scientist Examination Candidates approved to take an examination must do so within one year of the date of approval or submit a new application and fee and meet current requirements.

The examination is two parts. Each part will contain 100 multiple-choice test questions and is closed book. Each part will be 3.5 hours in length. The Content Outline is as follows:

Content	Weighting	Number of
Area	of	Questions
	Exam	
Part I:		
Knowledge		
1. Chemical	20%	20
Properties		
2. Physical	30%	30
Properties		
3.	10%	10
Mineralogy		
4. Soil	10%	10
Classification		
5. Soil	30%	30
Genesis		

Total Part I	100%	100
--------------	------	-----

Candidate comment forms will be available at the test site in the event that you wish to comment on a particular test question. Please request a form from the proctor at the completion of your testing session.

# Scoring and Reporting

There is no penalty for guessing so it is to your advantage to guess if you are unsure of the correct response. Candidates will be notified of passing or failing the examination, but shall not be notified of actual scores. The Office of Education and Examinations will notify you of your results approximately four weeks following the examination. Examination results are confidential and will not be released over the phone.

## **Re-examination**

Upon payment of the re-examination fee candidates must retake the failed Part(s) within one year of the date of initial failure notification or will be required to submit a new application and meet all current requirements.

Content Area	Weighting Exam	Number of Questions
Part II:		
Interpretation		
and Management		
1. Soil Survey and	20%	20
Mapping		
2. Photo	10%	10
Interpretation,		
Remote Sensing,		
GPS and GIS		
3. Land Use	70%	70
Management and		
Soil Interpretation		
A. Acid		
Sulfates (10%)		
B. Nutrient		

Management		
(20%)		
C. Shrink Swell		
(5%)		
D. Erosion		
Control (5%)		
E. Hydric Soils		
(10%)		
F. Soil		
Hydrology (10%)		
G. Other Use		
Management and		
Soil Interpretation		
(10%)		
Total Part II	100%	100

## References

Candidates may study other materials covering the same topics.

Brady, N., and R. Weil. 2003. *Elements of the Nature and Properties of Soils*. 2<sup>nd</sup> edition. Pearson Education. ISBN: 013048038X

Environmental Laboratory, 1987, on-line version update through 2006. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station, Vicksburg, MS.

Fanning, D.S., and M.C.B. Fanning. 1989. *Soil Morphology, Genesis and Classification*. John Wiley and Sons, Inc., Somerset, NJ. ISBN: 0471892483

Geographer's Craft. 2006. *Aerial Photography and Remote Sensing* (Online): www.colorado.edu/geography/gcraft/notes/remote/remote\_f.html

Mid-Atlantic Hydric Soils Committee. 2004. *A Guide to Hydric Soils in the Mid-Atlantic Region*. (Online): <a href="https://www.wv.nrcs.usda.gov/mlra/04\_mayMidAtlSoils.pdf">www.wv.nrcs.usda.gov/mlra/04\_mayMidAtlSoils.pdf</a>

Mid-Atlantic Regional Water Program.
February 2006. *Mid-Atlantic Nutrient Management Handbook*.

www.agnr.umd.edu/users/waterqual/themes/
nutrient\_management/manmh2006.htm

National Technical Committee for Hydric Soils. 2006. *Field Indicators of Hydric Soils and the Hydric Soils Technical Standard*. (Online): <a href="mailto:ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric-Soils/FieldIndicators\_v6\_0.pdf">ftp://ftp-fc.sc.egov.usda.gov/NSSC/Hydric-Soils/FieldIndicators\_v6\_0.pdf</a> and <a href="http://soils.usda.gov/use/hydric/ntchs/tech\_notes/index.html">http://soils.usda.gov/use/hydric/ntchs/tech\_notes/index.html</a> (Technical note 11)

Schoeneberger, P.J., Wysocki, D.A., Benham, E.C., and Broderson, W.D. (eds). 2002. *Field book for describing and sampling soils*, version 2.0. Natural Resources Conservation Service, USDA, National Soil Survey Center, Lincoln, NE. [Online]:

http://soils.usda.gov/technical/fieldbook/

Soils Science Society of America. 2006 *Glossary of Soil Science Terms*. [Online]: http://www.soils.org/sssagloss/

Soil Survey Division Staff. 1993. *Soil Survey Manual*. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. Hard Copy. ISBN 1410204170. [Online]:

http://soils.usda.gov/technical/manual/

Soil Survey Staff. *Keys to Soil Taxonomy*. USDA-NRCS. Tenth Edition. 2006. Hard copy: Pocahontas Press, Blacksburg, VA. 24060. [Online]:

http://soils.usda.gov/technical/classification/ tax\_keys/

Trimble Navigation, Ltd. 2006. *GPS Tutorial*. (Online): www.trimble.com/gps/gpswork-map.shtml

U.S. Department of Agriculture-Natural Resources Conservation Service. 2005. *National Soil Survey Handbook*, title 430-VI. [Online]:

http://soils.usda.gov/technical/handbook/detailedtoc.html#629

Vepraskas, M.J. 1995 (revised from May 1994). *Redoximorphic Features for Identifying Aquic Conditins*. Technical Bulletin 301, NCSU, Raleigh, NC. Order from: Department of Agriculture Communications, Box 7603, NCSU, Raleigh, NC 27695-7603. (919) 513.3173

Virginia Department of Conservation and Recreation. 1992. *Erosion and Sediment Control Program*. [Online]: www.dcr.virginia.gov/sw/e&s-ftp.htm Handbook link on program page. http://www.state.va.us/dcr/sw/e&s.htm#handbook

Virginia Department of Professional and Occupation Regulation. *Regulations Governing Certified Professional Soil Scientists*. Title 54.1, Chapter 22 §§ 54.1-2200-54.1-2208 and 18VAC145-20-10 through 18VAC145-20-170.

Virginia Tech. Revised October 2005. Virginia Phosphorus Index, Version 2.0. Technical Guide by M.L. Wolfe, J. Pease, L. Zelanzny, L. Daniels. Blacksburg, VA 24061

Wikipedia. 2006. *Aerial Photography*. The Free Encyclopedia. (Online): <a href="http://en.wikipedia.org/wiki/Aerial-photography">http://en.wikipedia.org/wiki/Aerial-photography</a>

Wikipedia. 2006. *Remote Sensing*. The Free Encyclopedia. (Online): <a href="http://en.wikipedia.org/wiki/Remote-sensing">http://en.wikipedia.org/wiki/Remote-sensing</a>

Bolstad, P. GIS Fundamentals: A First Text on Geographic Information Systems. 2nd

edition. Eider Press, White Bear Lake, MN

ISBN: 0971764719

Munsell Color Chart

U.S. Department of the Interior – U.S. Geological Survey. 28 Apr 2005. Topographic Map Sysbols.

http://erg.usga.gov/isb/pubs/booklets/symbols/index.html